

## **CHAPTER 2**

### **II. VARIATION IN LOCAL PUBLIC HEALTH AGENCY WORKFORCE BY SIZE OF POPULATION SERVED - 2005**

Forty-four percent (44%) of Missouri's local public health agency workforce is employed in the 13 public health jurisdictions that serve populations greater than 80,000. The remaining 101 agencies employ the rest (56%). The largest agencies are most likely to employ staff in full-time positions. Ten percent (10%) of the largest agencies' staff works part time while 37% of the staff in the smallest agencies is employed part time. Agencies serving populations of 20,001-40,000 had a higher turnover rate, with 19% of their staff hired in the last year. Agencies serving other population sizes hired from 12% to 13% of their staff during the past year. (See Graph 7.1 & 7.2 and Data Table 7.1 & 7.2)

#### **BENEFITS FOR LOCAL PUBLIC HEALTH WORKFORCE**

Most agencies (85% of smallest to 100% of largest) contribute to health insurance benefits for staff. However, of agencies serving populations greater than 80,000, 77% also contribute to dental insurance coverage; only 15% of agencies serving populations 20,000 or fewer are able to do so. Ninety-two percent (92%) of the largest agencies contribute toward life insurance for their staff, while only 67% of the smallest agencies do so. Staff retirement programs are supported by 100% of agencies in both groups that serve populations greater than 40,000. Seventy-six percent (76%) of the smallest agencies contribute toward this benefit, and 77% of agencies that serve populations from 20,001 to 40,000 contribute toward employee retirement. (See Graph 7.3 & 7.4 and Data Tables 7.3 & 7.4)

#### **PROFESSIONAL DEVELOPMENT**

Most agencies (89% of the smallest to 100% of both groups that serve populations over 40,000) have staff that participate in computer based training, satellite education programs, and other continuing education. Agencies serving populations over 80,000 are more likely than those in other groups to have staff participating in college courses as a means of professional development; 69% of agencies in this group utilize college courses compared to 42% to 50% of agencies in groups that serve other sizes of population. (See Graph 7.5.2 and Data Table 7.5.2)

#### **ADMINISTRATORS**

Over half (55%) of administrators in agencies that serve populations 20,000 or fewer are registered nurses. Nurses also fill the role as administrator in 50% of agencies that serve populations from 40,001 to 80,000. No agencies that serve populations greater than 80,000 have nurses as their administrator. (See Data Table 7.6.1)

The percentage of time spent on administrative activities increases in agencies serving larger populations. Eleven of the 13 administrators (85%) in the largest agencies spend all of their time on administration. Ninety-four percent (94%) of administrators in agencies serving populations from 40,001 to 80,000, 50% of administrators in agencies serving populations from 20,001 to 40,000, and only 42% of administrators in agencies serving populations 20,000 or fewer spend all of their time managing people and activities within their organization. A smaller percentage (49%) of the administrators in agencies serving in the agencies serving less than 20,000 population have successfully completed training on the Incident Command System, while

in the other three population size categories, 70% to 94% of the administrators have successfully completed that training. (See Graphs 7.6.3 & 7.6.3.2 and Data Tables 7.6.3 & 7.6.3.2)

Educational levels of administrators are highest in the largest agencies. Eighty-five percent (85%) of administrators in agencies serving populations over 80,000 have a master's or doctorate degree. The percentage of administrators with a bachelor's degree or above decreases from 100% in agencies serving populations greater than 80,000, and 88% in agencies serving populations from 40,001 to 80,000, down to 56% in agencies serving populations 20,000 or fewer. Twenty-four percent (24%) of administrators in agencies serving populations 20,000 or fewer, and 27% of administrators in agencies serving populations from 20,001 to 40,000 have high school as their highest graduation level. Seven percent (7%) and 13% of administrators in these respective groups are currently working towards a baccalaureate degree. (See Graph 7.6.4 and Data Table 7.6.4 & 7.6.6)

Over half (54% to 64%) of all administrators have been in their position 6 years or more. Administrators in the largest agencies were hired more recently; 46% have spent 5 years or less in their position. (See Graph 7.6.5 and Data Table 7.6.5)

Annual salary earned by an administrator increases with the size of population served by the agency. A majority (85%) of administrators in agencies serving populations greater than 80,000, earn an annual salary of \$75,000 or more. In agencies that serve populations from 40,001 to 80,000, the majority of administrators (69%) earn from \$55,000 to \$74,999. More administrators (50%) in agencies serving populations from 20,001 to 40,000 and 55% in agencies that serve populations of 20,000 or fewer earn between \$40,000 and \$54,999. (See Graph 7.6.7 and Data Table 7.6.7).

## NURSES

Registered nurses (RNs) make up approximately 26% of the total staff in agencies within the 3 groups that serve smaller sizes of population, but in agencies that serve populations greater than 80,000, RNs represent only 18% of their workforce. The agencies servicing larger populations are more likely to employ Advanced Practice RNs. Of the 55 Advanced Practice Registered Nurses, 40 are employed in agencies serving 40,000 or more. (See Graphs 7.7.1.1 thru 7.7.1.3 and Data Tables 7.7.1.1 thru 7.7.1.3)

There are 24 RNs that are certified by American Nurses Credential Center (ANCC) as Community Health Nurses currently working in local public health agencies. These are evenly distributed among agencies that serve populations up to 40,000 and those serving populations greater than 80,000. Only two certified nurses work in agencies serving populations between 40,001 and 80,000. (See Graph 7.7.3 thru 7.7.6 and Data Table 7.7.4)

A larger percentage (69% to 78%) of RNs working in the 3 groups of agencies that serve smaller sizes of population reportedly are practicing population-based public health nursing. Fifty-four percent (54%) of RNs working in the group of agencies serving populations over 80,000 report that they practice population-based public health nursing. A larger percentage (46%) of RNs working in agencies serving populations over 80,000 have successfully completed training on the Incident Command System, while only 17% to 25% of agencies serving populations in the other three size categories have successfully completed that training. (See Graphs 7.7.3 thru 7.7.6 and Data Tables 7.7.5 & 7.7.6)

Sixty-nine percent (69%) of agencies that serve populations greater than 80,000 pay their full-time registered nurses an average annual salary of \$40,000 or more; only 8% of agencies that serve populations of 20,000 or fewer pay nurses in this range. The largest percentage (62% to 84%) of agencies in all population groups under 80,000 pay nurses an average annual salary in the range between \$30,000 and \$39,999. No agency in the group serving the largest population size pays nurses an average annual salary less than \$30,000. However, 6% to 21% of agencies in the groups serving smaller population sizes pay nurses an average annual salary in the lowest range between \$20,000 and \$29,999. (See Graph 7.7.7 and Data Table 7.7.7)

Sixty-seven percent (67%) of agencies that serve populations greater than 80,000 pay Licensed Practical Nurses (LPNs) an annual average salary within the range between \$30,000 and \$39,999, however, the majority of agencies (88% or more) in other groups pay LPNs in a lower range between \$20,000 and \$29,999. LPNs represent 4% of the workforce in the smallest agencies, but only 1% of the workforce in the largest agencies. (See Graphs & 7.8.2 and Data Tables 7.8.1.1 & 7.8.2)

#### ENVIRONMENTAL SPECIALISTS

More agencies (59%) serving populations of 20,000 or fewer employ environmental specialists part time; in agencies serving populations 40,001-88,000, only 5% of the environmental specialists work part time. Twenty-nine percent (29%) to 33% of agencies that serve populations of 80,000 or fewer pay environmental specialists an average annual salary in the range between \$20,000 and \$29,999. The majority of agencies (61% to 91%) in all groups pay environmental specialists an average annual salary above \$30,000, and 33% of the largest agencies pay in a higher range from \$40,000 to \$54,999. (See Graphs 7.9.1.1 & 7.9.4 and Data Tables 7.9.1 & 7.9.4)

Sixty-three percent (63%) of environmental specialists working in the group of agencies serving populations over 80,000 have successfully completed training on the Incident Command System, compared to 26% to 37% in the other three groups of agencies. Fifty-one percent (51%) of environmental specialists working in the group of agencies that serve population sizes between 20,001 and 40,000 are state certified; only 10% of those working in the largest agencies are certified. Nationally registered environmental specialists range from 2% to 10% among the 4 groups of agencies. (See Graphs 7.9.3 and 7.9.5 and Data Tables 7.9.3 thru 7.9.5.2)

#### NUTRITIONISTS

Agencies serving populations of 20,000 or fewer are most likely to hire nutritionists as part-time staff. Seventy-nine percent (66%) of nutritionists in agencies serving populations of 20,000 or fewer work part time compared to approximately 20% in each of the 2 groups of agencies serving populations greater than 40,000. Half (50%) of full time nutritionists working in the smallest agencies earn an average annual salary in the range from \$20,000 to \$29,999. Eighty-eight percent (88%) of full-time nutritionists in the largest agencies and 60% of those working in agencies that serve populations from 40,001 to 80,000 earn an annual salary in a higher range of \$30,000 or more. (See Graphs 7.10.1.1 & 7.10.3 and Data Tables 7.10.1.1 & 7.10.3)

## DIETICIANS

Eighty percent (80%) of dietitians working in the largest agencies work in full-time positions. Only eighteen percent (18%) of those working in agencies serving populations of 20,000 or fewer work full-time; while 67% of those working in agencies that serve populations between 20,001 and 40,000 work full time. All dietitians in agencies that serve populations above 20,000 are registered dietitians. Eighty-two percent (82%) of dietitians in the smallest agencies are registered. The majority (67% to 100%) of agencies in each group pay dietitians an average annual salary in the range between \$30,000 and \$39,999. (See Graphs 7.11.1.1 thru 7.11.4 and Data Tables 7.11.1.1 thru 7.11.4)

## HEALTH EDUCATORS

Seventy-seven percent (77%) of the largest agencies have health educators; however, only 40% of agencies that serve populations of 20,000 or fewer have a health educator on staff. Eighty-nine percent (89%) of health educators in the largest agencies work full time, compared to the smallest agencies where only 55% are full time. Over half (60%) of the largest agencies pay full-time health educators an average annual salary over \$40,000. More than half (56%) of agencies in group serving populations up to 20,000 pay health educators in the lowest range between \$20,000 and \$29,999. Half of the 10 health educators that are Certified Health Education Specialists work in the largest agencies. (See Graphs 7.12.1 thru 7.12.4 and Data Tables 7.12.1 thru 7.12.4)

## SOCIAL WORKERS

Almost half (46%) of agencies that serve populations greater than 80,000 hire social workers, but only 7% of the smallest agencies have them. Thirty-six percent (36%) to 100% of social workers in the 3 groups of agencies that serve populations over 20,001 are licensed, while 20% in the smallest agencies are. (See Graphs 7.13.1 & 7.13.4 and Data Tables 7.13.1 & 7.13.4)

## SUPPORT STAFF

Support staff account for 30% of total workforce in agencies that serve populations between 20,001 and 40,000, and also 30% of total workforce in agencies that serve populations between 40,001 and 80,000. Only 21% of workforce in the largest agencies is comprised of support staff. Twenty-three percent (23%) of the support staff in the largest agencies have successfully completed training on the Incident Command System, compared to 10% to 13% of support staff in the other three groups of agencies who have successfully completed that training. As with most other categories of staff, more agencies that serve populations greater than 80,000 pay support staff an average annual salary in a higher range. Seventy-seven percent (77%) of the largest agencies pay in the range between \$20,000 and \$29,999 and 15% of them pay over \$30,000. Between 27% and 40% of agencies in the other 3 groups of agencies pay support staff in the lowest range below \$20,000. (See Graph 7.14.1.1 thru 7.14.4 and Data Table 7.14.1.1 thru 7.14.4)

## EPIDEMIOLOGY SPECIALISTS

One hundred percent (100%) of the largest agencies have epidemiology specialists on staff, but only 5% of the smallest agencies employ them. All of the epidemiology specialists in the agencies serving populations up to 20,000 have successfully completed training on the Incident Command System, with other sizes reporting that from 67% to 80% of the epidemiology specialists have completed that training. (See Graphs 7.15.1 & 7.15.3 and Data Tables 7.15.1 & 7.15.3)

## EMERGENCY RESPONSE PLANNERS

Each of the 13 largest agencies has an emergency response planner on staff; only 9% of the smallest agencies employ planners. In the 2 groups of agencies that serve populations over 40,001, each of the planners works full time. In the 2 groups of agencies that serve populations up to 40,000, 60% to 83% of planners work full time. All of the emergency response planners in the agencies serving population sizes of 20,001-40,000 and those serving 80,001 have successfully completed training on the Incident Command System. Eighty percent (80%) of the emergency response planners in the smallest agencies, and 89% of emergency response planners in the agencies serving populations of 40,001-80,000 have successfully completed training on the Incident Command System. (See Graphs 7.16.1 & 7.16.3 and Data Tables 7.16.1 & 7.16.3)

## PHYSICIANS

Only two full time physicians are employed in local public health agencies. Each of them works in an agency serving populations greater than 80,000. Six part-time physicians are employed and are distributed among the agencies serving 20,000 or more. Eighty percent (80%) of the agencies serving populations over 80,000 have physicians on retainer. Forty-five percent (45%) of the smallest agencies rely on volunteer physicians. (See Graph 7.17.1 thru 7.17.1.3 and Data Table 7.17.1.1 & 7.17.1.3)

## DENTISTS

Only 4 agencies employ dentists to work in public health. Three are full-time dentists who work in agencies that serve populations greater than 80,000. One part-time dentist works in an agency that serves a population between 20,001 and 40,000. The largest agencies have an additional 11 dentists on retainer. The smallest agencies, and those that service populations between 40,001 and 80,000 rely on volunteer dentists. (See Graph 7.17.2 thru 7.17.2.3 and Data Table 7.17.2 thru 7.17.2.3)

## OTHER LOCAL PUBLIC HEALTH AGENCY STAFF

Agencies serving populations greater than 80,000 reportedly have up to 31% of their workforce filling positions other than those described above, compared to agencies serving populations from 40,001 to 80,000 where only 11% of staff fill other kinds of positions. Fifty-nine percent (59%) of the 698 staff reported in the “other” category work in the largest agencies. (See Graph 7.18.1.1 & Data Table 7.18.1.1)